VERMONT

Vermont Department of Environmental Conservation *Agency of Natural Resources*
Drinking Water & Groundwater Protection Division
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dec.vermont.gov/water

2020 MONITORING SCHEDULE AND REQUIREMENTS

2020 monitoring schedules for all Public Water Systems are available online at https://anrweb.vt.gov/DEC/DWGWP/.

The online monitoring schedule for a public water system is updated as needed. The system will be notified by the Division of any changes made to the schedule throughout the year. The online schedule may not reflect special sampling required by permits, additional sampling directives from the Division, or new waiver applications still under review. All water quality samples on the monitoring schedule are required within the monitoring period specified and must be analyzed by a laboratory certified by the Vermont Department of Health for drinking water for the specific tests. A certified labs list is found here: https://www.healthvermont.gov/sites/default/files/documents/pdf/PHL_DW-Certified-Labs.pdf

Before sampling, confirm that the lab is certified for all required analyses. For example, the Vermont Department of Health Laboratory does not accept public drinking water samples for Asbestos, Cyanide, or Radium. If your preferred lab is not certified for the required analytes, call them to determine if they are subcontracting to a certified laboratory.

2020 PFAS Sampling: The Vermont Water Supply Rule is currently being revised to incorporate regulations of PFAS. The Rule is expected to go into effect in spring of 2020. In the proposed rule, all NTNC and Community water systems are required to sample for PFAS in 2020. Monitoring results received from the 2020 sampling will be used to determine future monitoring requirements. This approach is similar to initial monitoring requirements for organic chemicals within the standard monitoring framework and will provide a baseline of monitoring data necessary to assess the presence of PFAS at each system. As of January 30, 2020, the sampling requirements included in the proposed Rule are:

- If 2020 PFAS sample is non-detect (i.e. ND or < 2.0 ng/L) for all 5 regulated PFAS compounds, sampling may then be decreased to once every 3 years. Furthermore, if 2 consecutive 3-year monitoring results indicate non-detects, sampling frequency may be decreased to once every 6 years.
- If regulated PFAS are detected above 2 ng/L but less than 15 ng/L, annual monitoring continues. If regulated PFAS are detected above 15 ng/L, quarterly monitoring will be required.
- If regulated PFAS are detected above 20 ng/L, quarterly monitoring and a confirmation sample is required.
- If regulated PFAS are confirmed above 20 ng/L or detected above 40 ng/L in a sample, immediate Do Not Drink required.

Clearly indicate exact sampling location, Facility ID (e.g. TP001 for treatment plant, or DS001 for distribution system), Sample Point coding for the Division's database (e.g. EP001 for entry point to distribution sampling, TC001 for total coliform distribution sampling, or LC001 for lead and copper distribution sampling) and your water system identification number (WSID) on lab chain of custody forms (the paperwork that travels with the samples and part of the final lab report) – see more detailed guidance in each section below. Samples submitted for compliance monitoring are considered Routine "RT" except as noted on the following page. If you are unsure of the coding, please ask the Division contacts at the end of this document.

It is the responsibility of the water system to make sure sampling results are reported to the Division even if a lab offers electronic data submission. If results do not appear on the same website as the monitoring schedule within two weeks of you receiving the results from the lab, forward a copy of your lab report to the Division. If a required sample is not collected by the end of the monitoring period listed on your schedule (e.g., month, quarter, four-month period, or six-month period), or if results are not received by the reporting deadline, the system will incur a violation requiring the water system to distribute public notice for failure to monitor or report during the required period. If you have flexibility within the required monitoring period, sample early so that you have sufficient time to resample if, for example, bottles are delayed or damaged in transit or a sample is rejected by the lab.

The tables below help identify what Facility ID and Sample Point codes mean on the monitoring schedule:

Facility IDs:
WL = WELL/SPRING
TP = TREATMENT PLANT
DS = DISTRIBUTION SYSTEM
IN = INTAKE (SURFACE WATER)
ST = STORAGE TANK
PF = PUMP FACILITY
TM = TRANSMISSION MAIN

Sample Points:
RW = RAW WATER
EP = ENTRY POINT
AS = ASBESTOS
LC = LEAD AND COPPER
TC = TOTAL COLIFORM
HA = HALOACETIC ACIDS
TH = TRIHALOMETHANES

Raw Water Monitoring (Groundwater Rule)

Groundwater Rule: The Groundwater Rule requires groundwater systems to have a source sample tap installed before water treatment at Community and Non-Transient Non-Community (NTNC) systems. Transient Non-Community (TNC) groundwater systems are encouraged to have a source water sample tap. Source water monitoring is required if total coliform is present in the distribution system. This is known as "triggered source monitoring" or TG and should be coded as "TG" on the lab forms. The raw water sampling tap for each source must be identified on the Revised Total Coliform Rule coliform sampling plan.

Entry Point/Finished Water Monitoring (IOCs, SOCs, VOCs, Nitrate, PFAS, and Radionuclides)

Chemical and Radionuclide samples must be taken from finished water at the entry point to the distribution system. This sampling point is located after all treatment and storage (if possible), prior to or at the first user. Water systems should have a dedicated finished water sampling tap. Please refer to your monitoring schedule for the specific Sample Point and Facility ID for your water system. Record the Sample Point (e.g. EP001, EP002, etc.), the Facility ID (e.g. TP001, ST003, etc.) and your Sampling Location description (Sample Site) on the lab sample intake forms (i.e. chain of custody). Samples must be coded as Routine, "RT" on the lab forms to be considered for compliance. Samples not for compliance purposes, such as part of a construction permit, must be coded as Special "SP" samples. Missing any of the required coding or incorrect coding information could result in a violation for failure to monitor during the required period. More information on chemical monitoring can be found on our website: http://dec.vermont.gov/water/drinking-water/water-quality-monitoring/chems.

Distribution System Monitoring (Total Coliform, Lead & Copper, Disinfection Byproducts)

Total Coliform (TC): The Revised Total Coliform Rule (RTCR) went into effect on April 1, 2016 with some different requirements for bacterial monitoring and system assessments than the previous coliform rule. Review the Division's RTCR website at http://dec.vermont.gov/water/drinking-water/water-quality-monitoring/total-coliform.

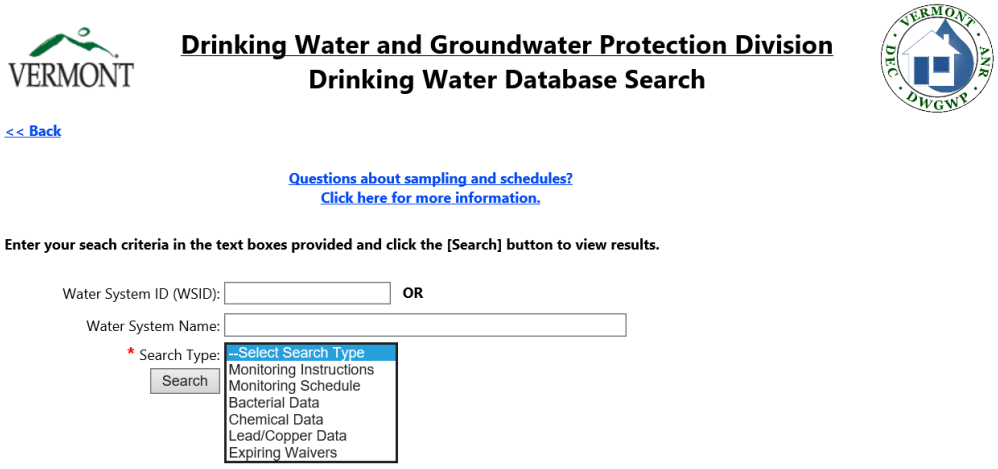
Total coliform bacteria samples must be taken in the distribution system at locations in the system's approved Coliform Sampling Plan. Record the category for each total coliform sample on the lab forms that are submitted to the lab along with each sample: Routine (RT) = Routine distribution sample(s) required by monitoring schedule and any required distribution samples the following month after a total coliform (TC) positive Routine sample. Repeat (RP) = distribution samples required immediately after TC positive Routine Sample. Triggered Source (TG) = groundwater source sample(s) required immediately after TC positive routine sample. Note that samples coded as Special (SP) do not count for compliance purposes. Be sure your system codes the samples correctly; the Division will not change coding for samples received, which may result in a Monitoring & Reporting Violation.

When using a chemical disinfectant, a system must also measure and record free chlorine residual (or total chlorine if a free chlorine residual is not detectable) at the same time and locations where each total coliform sample is collected. These results must be reported on the lab forms that are submitted to the lab along with the sample(s) to be analyzed and also on the system's monthly operations report.

Lead & Copper: Samples must be taken from distribution system locations in an approved Lead and Copper Sampling Plan by tiers based on plumbing content and age. If your system does not have a recently approved plan or you need to update a prior plan, see the guidance and form on the Division's lead and copper rule website and/or

contact the Division. Use current sampling procedures for first-draw lead and copper available on the Division's lead and copper website. It is against EPA and Division guidance to intentionally flush sample taps prior to the 6 hour minimum stagnation period. Fill the bottle in a single flow as close as you can to the 1 Liter mark on the bottle. Volumes far above or below this will be noted by the lab and may be rejected by the Division. When you submit samples, indicate the facility ID (e.g., DS001 or DS002 for the distribution system) and sample point (e.g., LC001 or LC002) and code the samples as RT when they are for routine compliance purposes. If you need to submit entry point or special diagnostic samples including flushed, follow-up, or smaller volume samples, make sure they are coded as SP, which will not be counted for compliance. For schools and child care facilities, additional lead testing required under Act 66 is managed by the Vermont Department of Health, not the Division.

Disinfection Byproducts (DBP): Community and NTNC systems that regularly and routinely add chlorine or chloramine or receive disinfected water from another system are required to test for total trihalomethanes (TTHM) and the five regulated haloacetic acids (HAA5) at approved locations. This includes systems that disinfect for part of the year on a routine basis (e.g., each summer). DBP monitoring is not required with chlorination under a defined condition for a short duration of time such as water line repair. A system whose chlorination status has changed must contact the Division for an updated schedule. The DBP Sampling Plan form is available on the Division website, by email, or by mail. Sample at locations specified in your approved Sampling Plan. Some systems must sample for TTHM and HAA5 at different locations; some collect both at each location. Lab kits may require multiple vials for each analysis; follow the lab's instructions. Record the Facility ID (DS001, DS002, etc.), Sample Point ID (TH001, HA001, etc.), and Sample Location (address, building name, or room number) on the lab form. DBP samples must be collected in a specific month or specific months as shown on the schedule.



The following Division contacts can answer questions regarding specific rule monitoring:

Total Coliform & Groundwater Rule

David Love, Community & NTNCs, (802) 585-4902, david.love@vermont.gov
Tanya Dyson, TNC systems, (802) 461-6143, tanya.dyson@vermont.gov

Phase II/V Chemical Contaminants including PFAS, Radionuclide Rule, Monitoring Waivers

Janelle Wilbur, (802) 585-4898, janelle.wilbur@vermont.gov

Lead & Copper; Disinfection Byproducts

Amy Galford, (802) 585-4891, amy.galford@vermont.gov

Overall questions

Jeff Girard, Compliance & Certification Manager (802) 585-0314, jeff.girard@vermont.gov
Ben Montross, Compliance and Support Services Section Chief (802) 498-8981, ben.montross@vermont.gov